U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY PATENT APPLICATION TRANSMITTAL

| Attorney Docket No. First Inventor |  | 5000-1-407            |  |  |
|------------------------------------|--|-----------------------|--|--|
|                                    |  | Dae-Kwang JUNG et al. |  |  |
| Title WAVELENGTH-DIVISION          |  |                       |  |  |
|                                    |  | EV 226741004 HC       |  |  |

| (Only for new nonprovisi  | onal applications under 37 CFR 1.53(b))                           | Express Mail Label No. EV 326741904 US  |  |  |  |  |
|---|---|---|--|--|--|--|
|   | ATION ELEMENTS  | ADDRESS TO: Assistant Commissioner for Patents Box Patent Application   |  |  |  |  |
|   | ncerning utility patent application contents.                     |   |  |  |  |  |
| 1. X Fee Transmittal (Submit an original and                                | Form (e.g., PTO/SB/17) a duplicate for fee processing)            | 7. CD-ROM or CD-R in duplicate, large table or  |  |  |  |  |
| Applicant claims  | small entity status.  | Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission  |  |  |  |  |
| See 37 CFR 1.2  |   | (if applicable, all necessary)  |  |  |  |  |
| 3. X Specification (preferred arrangeme                                     | [Total Pages 29]] ent set forth below) e of the invention         | a. Computer Readable Form (CRF)   |  |  |  |  |
|   | e of the invention<br>ice to Related Applications                 | <ul> <li>b. Specification Sequence Listing on:</li> </ul>   |  |  |  |  |
| - Statement Reg   | garding Fed sponsored R & D                                       | i. CD-ROM or CD-R (2 copies); or  |  |  |  |  |
| - Reference to s  | equence listing, a table,<br>program listing appendix             | i i. 🔲 paper  |  |  |  |  |
| - Background o  | f the Invention   | c. Statements verifying identity of above copies  |  |  |  |  |
| - Brief Summan  | y of the Invention<br>on of the Drawings ( <i>if filed</i> )      | ACCOMPANYING APPLICATION PARTS  |  |  |  |  |
| - Detailed Description  |   | 9. X Assignment Papers (cover sheet & document(s))  |  |  |  |  |
| - Claim(s)  | Di I  | 37 CFR 3 73(b) Statement Dower of   |  |  |  |  |
| - Abstract of the   |   | (when there is an assignee) X Attorney  |  |  |  |  |
| 4. X Drawing(s) (35 t   | · · = ·   | 11 English Translation Document (if applicable)  Information Disclosure Copies of IDS   |  |  |  |  |
| 5. Oath or Declaration  | [ Total Pages 2 ]   | Statement (IDS)/PTO-1449 Citations  |  |  |  |  |
| a. X Newly exec   | cuted (original or copy)<br>a prior application (37 CFR 1.63 (d)) | 13. Preliminary Amendment   |  |  |  |  |
| b. (for continue  | ation/divisional with Box 18 completed)                           | 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized)  |  |  |  |  |
|   | TION OF INVENTOR(S) atement attached deleting inventor(s)         | 15. X Certified Copy of Priority Document(s) (if foreign priority is claimed)   |  |  |  |  |
| named in  | the prior application, see 37 CFR                                 | 16. Request and Certification under 35 U.S.C. 122   |  |  |  |  |
| 1.63(d)(2)  | ) and 1.33(b).  | (b)(2)(B)(i). Applicant must attach form PTO/SB/35  |  |  |  |  |
| 6. Application Data   | Sheet. See 37 CFR 1.76  | or its equivalent.  |  |  |  |  |
| 18 If a CONTINUING APPL   | ICATION shock appropriate how and are                             |   |  |  |  |  |
| or in an Application Data Sh  | eet under 37 CFR 1.76:  | ply the requisite information below and in a preliminary amendment,   |  |  |  |  |
| Continuation  | Divisional Continuation-in-part (CIP)                             | of prior application No.:/  |  |  |  |  |
| Prior application information:  | Examiner  | Group Art Unit:   |  |  |  |  |
| For CONTINUATION OR DIVIS   | IONAL APPS only: The entire disciosure of the                     | ne prior application, from which an oath or declaration is supplied under   |  |  |  |  |
| The incorporation can only be   | relied upon when a portion has been inadve                        | uation or divisional application and is hereby incorporated by reference. rtently omitted from the submitted application parts. |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·                                       | 19. CORRESPOND  | ENCE ADDRESS  |  |  |  |  |
| X Customer Number or Bar Code Label (Insert Customer No. or Attach bar code |   | or Correspondence address below   |  |  |  |  |
|   | finant costomer Na. of Atlanti ba                                 | r code label fiele)   |  |  |  |  |
| Name  |   |   |  |  |  |  |
|   | ·   |   |  |  |  |  |
| Address   |   |   |  |  |  |  |
| City  |   | State Zip Code  |  |  |  |  |
| Country   | Tele  | ephone Fax  |  |  |  |  |
| Name (Print/Type) Steve S. Cha Registration No. (Attorney/Agent) 44,069     |   |   |  |  |  |  |
| Signature   | 4/8   | Date 8/18/03  |  |  |  |  |
|   |   |   |  |  |  |  |

Burden Hour Statement: This form is estimated to take 0.2 hours of complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form fould be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



PTO/SB/17 (01-03) Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

\_\_\_ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

| e s  | CFR   | 1.27 |  |
|------|-------|------|--|
| (\$) | 1,000 | .00  |  |

|                      | omplete if Known      |
|----------------------|-----------------------|
| Application Number   | Not yet assigned      |
| Filing Date          | August 18, 2003       |
| First Named Inventor | Dae-Kwang JUNG et al. |
| Examiner Name        | Not yet assigned      |
| Art Unit             | Not yet assigned      |
| Attorney Docket No.  | 5000-1-407            |

| METHOD OF PAYMENT (check all that apply)  | FEE CALCULATION (continued)                               |             |             |             |  |              |
|---|---|-------------|-------------|-------------|--|--------------|
| Check Credit card Money Other None  | 3. ADDITIONAL FEES  |             |             |             |  |              |
| Deposit Account:  | Large Entity   Small Entity                               |             |             |             |  |              |
| Deposit<br>Account 502-470  | Fee<br>Code   | Fee<br>(\$) | Fee<br>Code | Fee<br>(\$) | Fee Description  | Fee Paid     |
| Number  | 1051  | 130         | 2051        | 65          | Surcharge - late filing fee or oath  |              |
| Deposit<br>Account<br>Name CHA & REITER   | 1052  | 50          | 2052        | 25          | Surcharge - late provisional filing fee or cover sheet                     |              |
| Name The Commissioner is authorized to: (check all that apply)  | 1053  | 130         | 1053        | 130         | Non-English specification  | ├            |
| Charge fee(s) indicated below Credit any overpayments   | 1812  | 2,520       | 1812        | 2,520       | For filing a request for ex parte reexamination                            | <u> </u>     |
| Charge any additional fee(s) during the pendency of this application                                      | 1804  | 920*        | 1804        | 920*        | Requesting publication of SIR prior to<br>Examiner action                  |              |
| Charge fee(s) indicated below, except for the filing fee  | 1805  | 1,840*      | 1805        | 1,840*      | Requesting publication of SIR after Examiner action                        |              |
| to the above-identified deposit account.  | 1251  | 110         | 2251        | 55          | Extension for reply within first month                                     |              |
| FEE CALCULATION   | 1252  | 410         | 2252        | 205         | Extension for reply within second month                                    | \ \ \ \ \ \  |
| 1. BASIC FILING FEE   | 1252  | 930         | 2253        |             | Extension for reply within third month                                     |              |
| Large Entity Small Entity Fee Fee Fee Fee Description Fee Paid  |   | 1.450       | 2254        | 725         | Extension for reply within fourth month                                    |              |
| Code (\$) Code (\$)   |   |             |             |             | Extension for reply within fifth month                                     |              |
| 1001 750 2001 375 Utility filing fee 750.00   |   | 1,970       | 2255        | 985         | • •  |              |
| 1002 330 2002 165 Design filing fee   | 1401  | 320         | 2401        |             | Notice of Appeal   | <del> </del> |
| 1003 520 2003 260 Plant filing fee  | 1402  | 320         | 2402        |             | Filing a brief in support of an appeal                                     |              |
| 1004 750 2004 375 Reissue filing fee  | 1403  | 280         | 2403        |             | Request for oral hearing   | <b></b>      |
| 1005 160 2005 80 Provisional filing fee   | 1451  | 1,510       | 1451        |             | Petition to institute a public use proceeding                              | <b> </b>     |
| SUBTOTAL (1) (\$) 750.00  | 1452  | 110         | 2452        | 55          | Petition to revive - unavoidable   | <del></del>  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE   | 1453  | 1,300       | 2453        | 650         | Petition to revive - unintentional   | <b>  </b>    |
| Fee from  | 1501  | 1,300       | 2501        | 650         | Utility issue fee (or reissue)   |              |
| Extra Claims below Fee Paid  Total Claims 27 .20** = 7 x 18 = 126   | 1502  | 470         | 2502        |             | Design issue fee   | <b>  </b>    |
| Indonosident 20 Telephone   | 1503  | 630         | 2503        | 315         | Plant issue fee  |              |
| Claims  Multiple Dependent  X 84 = 84   S4   S4   S4   S4   S4   S4   S4                                  | 1460  | 130         | 1460        | 130         | Petitions to the Commissioner  | L            |
| Multiple Department   | 1807  | 50          | 1807        | 7 50        | Processing fee under 37 CFR 1.17(q)  |              |
| Large Entity   Small Entity Fee Fee Fee Fee Fee Description   | 1806  | 180         | 1806        |             | Submission of Information Disclosure Stmt                                  |              |
| Code (\$) Code (\$)   | 8021  | 40          | 8021        | 1 40        | Recording each patent assignment per property (times number of properties) | 40.00        |
| 1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3                   | 1809  | 750         | 2809        |             | Filing a submission after final rejection                                  |              |
| 1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claim, if not paid | 1010  | 750         | 0046        |             | (37 CFR 1.129(a))  |              |
|   | 1810  | 750         | 2810        | 3/5         | For each additional invention to be examined (37 CFR 1.129(b))             |              |
| 1204 84 2204 42 ** Reissue independent claims over original patent  | 1801  | 750         | 2801        | 375         | Request for Continued Examination (RCE)                                    |              |
| 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent                                 | 1802  | 900         | 1802        | 900         | Request for expedited examination of a design application                  |              |
| J., 010 00  | Other   | fee (sp     | ecify) _    |             | - ''   |              |
|   | *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 |             |             |             |  |              |
| **or number previously paid, if greater; For Reissues, see above  |   |             |             |             |  |              |

SUBMITTED BY

Name (Print/Type) Steve S. Cha

Registration No. (Attornev/Agent) 44,069

Telephone 201-518-5518

Date 1/8/0 3

WARNING: Information openis form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.